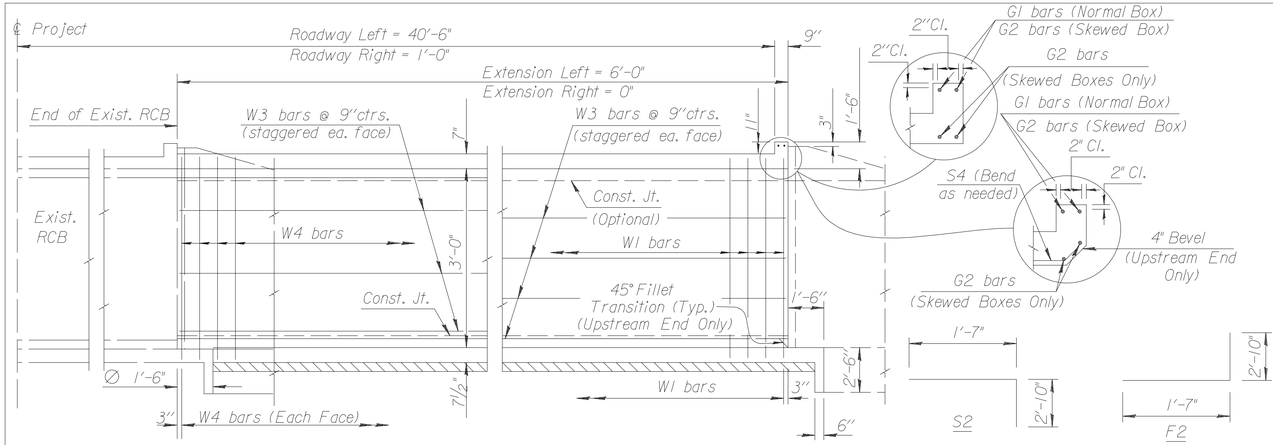
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84004	2005	98	215

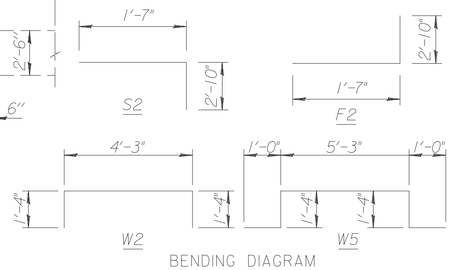


∅ Floor Slab to remain on existing flared wing structures.

INTERIOR WALL

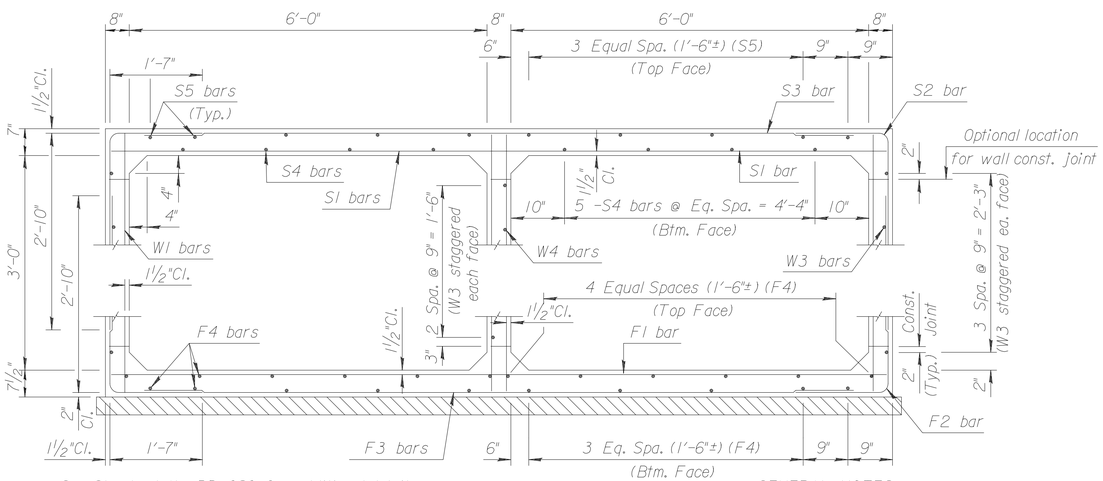
SECTION AND ELEVATION
(Normal to ℄ Roadway)

EXTERIOR WALL



BENDING DIAGRAM

All Dimensions are out to out of bars.

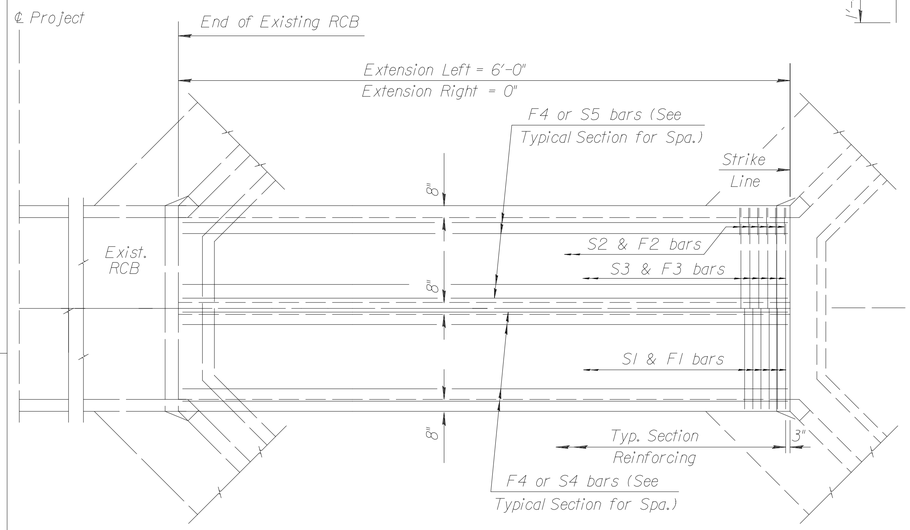


See Standard No. RD 080 for additional details.
Note: Use only cast-in-place construction at this location.

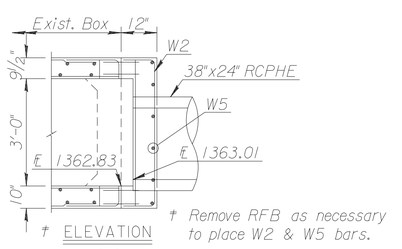
TYPICAL SECTION

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding. Where Grade 4.0 Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Grade 4.0 Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.
SEAL COURSE: A Seal Course shall be constructed below the R.C.B. as shown in the Plans. The Seal Course shall consist of a 6" of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet the requirements for Portland Cement Concrete Pavement Coarse Aggregate, Section 406.2, City of Wichita Standard Specifications, Wichita Standard Specifications. No reinforcing shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Payment for additional quantities that result from including seal course and/or floating apron, as a change in original plans, shall be made at the Unit Price bid for the various items involved.
STRIKE LINE: Wingwalls and that portion of the RCB outside the Strike Line shall be constructed level. Footing for wingwalls shall be constructed with the culvert floor. See wingwall detail sheet.
PAYMENT: Concrete and reinforcing for storm sewer paid for as part of the extension per unit quantity. Concrete removal, excavation and all other incidentals necessary shall be subsidiary to the extension quantities.

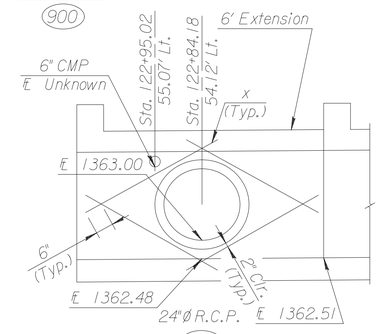


PLAN



† Remove RFB as necessary to place W2 & W5 bars.

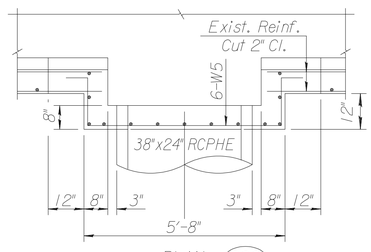
† ELEVATION
900



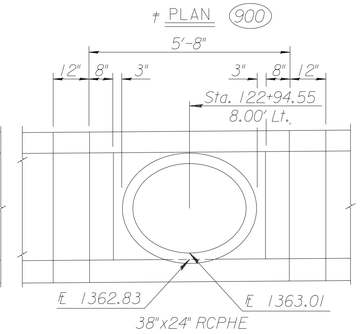
✡ Field cut for 2" Clear.

800

ELEVATION



† PLAN
900



900

Minimum Splice Lengths	
#4	1'-4"
#5	1'-8"
#6	2'-0"

∗See Bending Diagram

CULVERT SUMMARY

	Flow Line Elev.	Crown Gr. Elev.	Design Fill Ht.	Skew	Wings	Scour Apron	Soil Saver	Concrete Barrel (Cu.Yds.)	Concrete Wings (Cu.Yds.)	Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)	Reinf. Steel (Gr. 60) Wings (Lbs.)	Reinf. Steel (Gr. 60) Total (Lbs.)
Ext.Lt.	1362.48	1367.64	3	0	FLARED	NO	NO	6.40	3.88	10.28	953.71	319.19	1272.9
Ext.Rt.	1362.50				NONE			0.00	0.00	0.00	0	0	0

BAR SCHEDULE

	F1 Size	F1 Spa.	F1 No.	F1 Length	F2 * Size	F2 * Spa.	F2 * No.	F2 * Length	F3 Size	F3 Spa.	F3 No.	F3 Length	F4 Size	F4 No.	F4 Length	S1 Size	S1 Spa.	S1 No.	S1 Length	S2 * Size	S2 * Spa.	S2 * No.	S2 * Length	S3 Size	S3 Spa.	S3 No.	S3 Length	S4 Size	S4 No.	S4 Length	S5 Size	S5 No.	S5 Length
Ext.Lt.	4	7"	10	13'-8"	5	12"	12	4'-5"	4	6"	9	13'-8"	4	20	4'-2"	4	7"	12	13'-8"	5	12"	14	4'-5"	4	6"	12	13'-8"	4	10	5'-8"	4	10	5'-8"
Ext.Rt.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	K1 Size	K1 Spa.	K1 No.	K1 Length	W5 Size	W5 Spa.	W5 No.	W5 Length	W1 Size	W1 Spa.	W1 No.	W1 Length	W2 Size	W2 Spa.	W2 No.	W2 Length	W3 Size	W3 No.	W3 Length	W4 Size	W4 Spa.	W4 No.	W4 Length	G1 Size	G1 No.	G1 Length	X Size	X No.	X Length
Ext.Lt.	N/A	N/A	N/A		5	9"	6	9'-11"	4	7"	20	3'-11"	5	8"	9	6'-11"	4	11	5'-8"	4	7"	20	3'-11"	5	2	13'-8"	N/A	N/A	4'-3"
Ext.Rt.	N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SUMMARY OF QUANTITIES

Concrete (Grade 4.0)	0.0 C.Y.
Concrete (Grade 4.0)(AE)	10.3 C.Y.
Reinforcing Steel (Gr. 60)	0 Lbs.
Reinforcing Steel (Epoxy Coated)	1275 Lbs.
Class III Excavation	—— C.Y.
Seal Course (Granular Base)	1.5 C.Y.
Bridge Handrail (Steel) (Pedestrian)	30.5 L.F.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
Str. No. (559) Sta. 122+89.59
DOUBLE 6 ft x 3 ft RFB
6.0 ft EXT. LT.
~~BR 2.6.3 F~~ Sedgwick Co.

FHWA APPROVAL	6-5-91	APP'D	KENNETH F. HURST
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.

Plotted By: drp
Plot Location: $UNIT$
File: i:/2004/04219/FINAL/04219-000_C-Double6'x3'RCBext(EKIV17).dgn
Plot Date: 9-27-2005